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Patent Application

Method of . . ." and "Apparatus for:

Quantum Vortex Implosion Propulsion and Species

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Quantum Electro-Vortex Implosion Propulsion and Species

Description

BACKGROUND OF THE INVENTION

1. Field of the Invention

The vacuum of space contains an enormous residual background energy with densities estimated to be on the order of nuclear energy densities. Zero point energy was predicted by quantum theory and verified via experimentation and is known to play a role in large-scale phenomena of interest, including, aerodynamics, fluid mechanics, renewable superconductive energy, holographic optical communication technologies. Linear spectral filtering which offers unique potential for future high-bandwidth communication systems. Inhibition of spontaneous emission, the generation of short-range attractive forces (e.g., the Casimir force.) Topics of interest range from space-flight applications to fundamental issues of renewable energy sources to cavity-QED (Quantum Electro-dynamics) laboratory attempts extracting useful energy from vacuum fluctuations thereby verifying environmental energy may indeed be extracted for practical use.

Selectively engineered shapes may convey energy via high and low-pressure differentials with emphasis on convergence zones, i.e., when high pressure air flips from underneath a wings surface over onto the upper section of the wing where low pressures abound whereby a vortex is formed via the high and low pressure convergence of two opposing forces Volume II Fig. 2.

Physicist M. J. Sparnaay discovered the existence of zero point electromagnetic radiation in 1958 continued experimentation carried out by Hendrik B. G. Casimir in 1948, showed the existence of a force between two uncharged parallel plates, which arose from electromagnetic radiation surrounding the plates in a vacuum. Mr. Sparnaay discovered that the forces acting on the plates arose from both thermal radiation and another type of radiation now known as zero point radiation.

Because zero point radiation exists in a vacuum it is homogeneous, isotropic and ubiquitous. In addition, zero point radiation is invariant with respect to Lorentz transformation; the zero point radiation spectrum has the characteristic that the intensity of the radiation at any frequency is proportional to the cube of that frequency.

Consequently, the intensity of the radiation increases without limit as the frequency increases resulting in an infinite energy density for the radiation spectrum. Special characteristics of the zero point radiation, is it has a virtually infinite energy density and that it is ubiquitous (present in outer space) make it very desirable as an energy source.

However, because high energy densities exist at very high radiation frequencies and because conventional methods are only able to convert or extract energy effectively or efficiently only at lower frequencies at which zero point radiation has relatively low energy densities, effectively tapping this energy source has been believed to be unavailable using conventional techniques for converting electromagnetic energy to electrical or other forms of easily useable energy. Consequently, zero point electromagnetic radiation energy which may potentially be used to power interplanetary craft as well as provide for society's other needs has remained until now an untapped renewable energy source.

There are many types of prior art systems that use a plurality of antennas to receive electromagnetic radiation and provide an electrical output therefrom. An example of such a prior art system is disclosed in U.S. Patent 5,590,031 Mead, Jr. December 31, 1996. The Mead system utilizes a plurality of dielectric antenna structures which work in tandem and which oscillate by means of volumetric sizing thereto in order to modulate the radiation reflected from the antenna surfaces. A distance equal to a quarter wavelength of the incident radiation also separates the reflecting surfaces of the antennas. However, while the Mead system does convert the incident radiation to electrical current it falls short of any type of re-amplification system for the purpose of converting the incident electromagnetic radiation to electrical energy to another form of readily useable energy or propulsion force. In addition, this lack of a re-amplification system of the Mead system components renders it unable to resonate at and modulate at very high frequency radiation.

Therefore a system is needed which is capable of converting high frequency electromagnetic radiation energy into another form of energy which can be more readily used to provide power for transportation, heating, cooling as well as various other needs of society. What is also needed is such a system that may be used to provide energy from any location on earth or in space.

2. Description of the Prior Art

Cavity quantum electrodynamics (cavity QED) may be loosely described as the study of atom-field dynamics in the presence of boundaries said boundaries collectively constituting a cavity and are significant in that they perturb the spatial and/or spectral structure and distribution of electromagnetic field modes relative to the free-space norm, thereby opening the door to new and unique phenomenology. Since both propagation and radiation phenomena co-exist in open guides, they are common in practice but hard to understand theoretically.

Standard classical optical design procedures along with the intuitive concept of hour-glass-type optical modes are employed to produce cavities that provide strong atom-cavity coupling for Atoms that are spread over a relatively large spatial region. Such cavities may be employed to provide macroscopic environments in which ordinarily microscopic quantum optical phenomena play an essential role. Recent research advances into the physics of Optical Cavity QED underlying vacuum pumping, Rabi splitting reveals the indications of potential applications made possible in all these areas of interest. Key factors to the realization of these potential technologies is the development of robust, cost-effective and fully integrated filtering devices derived from the unique properties of Optical Atom-Coupled Waveguide Technologies.

A wide range of physical systems fall within the scope of cavity QED. At one extreme, we have an isolated atom interacting with a single undampened field mode. More realistically, systems may consist of atoms and field modes, all of which experience damping due to the interaction with one or more reservoir. Many physical models have been considered and numerous categories of cavity QED phenomena have been identified. Phenomena that are specifically identified with cavity QED tend to appear in the regime of strong atom-cavity coupling i.e., when the interaction of an atom with a single cavity photon becomes important.

For the most part, experimenters have worked with one basic cavity parameter in their efforts to realize strong atom-cavity coupling, the overall cavity mode volume. Through minimization of this parameter, relatively strong atom-cavity coupling has been realized in both the optical and microwave regimes.

Cavity mode volume does not, however, tell the whole story. Strong atom-cavity coupling has, for example, been demonstrated in large cm-scale optical cavities and attributed to the combination effect of many spectrally degenerate large-volume modes. It should be noted that optical design methods can-be employed to create macroscopic environments wherein normally microscopic quantum optical phenomena play an essential role.

In 1946, Purcell predicted that the spontaneous emission rate of an atom located in a cavity tuned to the atomic-transition frequency would be subsequently larger than in free space. The enhancement results from a cavity-induced increase in photon-mode density at the atomic-transition frequency. Following this idea, Kleppner predicted that the opposite effect i.e., suppression of spontaneous emission, occurs if a cavity is employed to reduce the density of photon modes in the spectral region of the atomic transition.

In fact, Kleppner predicted that spontaneous-emission could be eliminated altogether by placing an atom in a waveguide below cut off. Kleppner's paper stimulated a series of experimental works on the subject in both microwave and optical regimes. In most of the experiments the dimension of the cavity was comparable to the wavelength. Heinzen showed that analogous effects could be observed in con-focal cavities of large dimensions, i.e., by imposing a strong driving field on the atoms. In order for such a dynamic effect to occur, the atoms must reside in a region of space in which the density of photon modes varies appreciably on a frequency scale set by the Rabi frequency of the driving field.

Cavities provide a natural setting for frequency-dependent mode densities but they may also arise in diverse environments, including those involving the solid-state thereby emphasizing the effect of strong driving fields on spontaneous-emission rates in this particular situation the irradiated atom is within a cavity. Resonance-fluorescence spectra have been analyzed and shown to possess features indicative of dynamic modifications of spontaneous emission.

New insights into the statistical properties of the quantum electromagnetic field in cavities has been achieved with the discovery of vacuum Rabi splitting which can be considered as another type of modification of the spontaneous-emission process. In the regime, where the cavity width becomes comparable or smaller than the atomic spontaneous emission rate the resonance-fluorescence spectral consists of two separate peaks. The splitting reflects the splitting of the lowest excited energy levels and may-be observed when light is transmitted through an atom-containing cavity which will under-go substantial relative squeezing.

Placing atoms inside an optical cavity can create composite atom-cavity systems. The behavior of such coupled system can often be more complex and thus richer than that of either the atoms or the cavity when considered separately. The properties of such atom-cavity systems are important because they play a vital role in the analysis and the effects of such optical coupled quantum fluctuations.

It has been predicted that the insertion of a single atom into a cavity can lead to a splitting in the atomic fluorescence spectra when the atom is strongly coupled to the cavity. The splitting termed the vacuum Rabi splitting has attracted the attention of the quantum optics community because it is considered to be an important manifestation of the quantum nature of the electromagnetic field.

In the optical regime experimental confirmation of the single-atom vacuum Rabi splitting has been precluded by the smallish size of the coupling between the atom and the cavity. Fortunately, it has been shown that the cavity resonance splitting also occurs when many atoms are inserted into a cavity and that the magnitude of the splitting increases with the square root of the number of atoms inserted. Multi-atom enhancement has been employed successfully in an effort to observe vacuum Rabi splitting. From the perspective of quantum optics the vacuum Rabi splitting may be seen to follow from the exchange of excitation back and forth between the atoms in the cavity field. In the transient regime this exchange is manifest as a temporal oscillation on the light transmitted through the cavity from the classical perspective the atom cavity system is a simple linear system and the time and frequency domain responses of the system are connected via Fourier transformation.

The influence of environment on spontaneous radiative decay properties has attracted considerable attention in recent years it has been predicted that cavity confined atoms may experience an inhibition of spontaneous emission because of cavity-induced reduction in resonant electromagnetic-mode density. The voracity of this prediction has been demonstrated by experiments in the microwave, infrared, and optical regimes. The opposite effect in which the spontaneous decay rate is enhanced over free space value is because of the cavity-induced increase in mode density. These results have stimulated a number of theoretical works related to modify spontaneous emission under various special circumstances.

Entirely new phenomenon including dynamic suppression of spontaneous emission dressed-state pumping atomic squeezing have been predicted to occur in cases were the vacuum reservoir is frequency dependent on a scale comparable to or finer than the atomic resonance width.

3. Description of the Prior Art

VACUUM ENERGY

An approach based on a 1987 paper by H. E. Puthoff, Ph.D. utilizing micro-gravity techniques to perturb the ground state stability of atomic hydrogen in which he puts forth the hypothesis:

"That the nonradiative nature of the ground state is due to a dynamic equilibrium in which radiation emitted due to accelerated electron ground state motion is compensated by absorption from the ZPE". If this hypothesis is true, there exists the potential for energy generation by the application of the techniques of cavity quantum electrodynamics (QED). In cavity QED, excited atoms are passed through Casimir-like cavities whose structure suppresses electromagnetic cavity modes at the transition frequency between the atom's excited and ground states. With the introduction of the zero point radiation a vacuum at absolute zero is no longer considered empty. Instead, the vacuum is now considered as filled with randomly fluctuating fields having the zero point radiation spectrums. Special characteristics of ZPE that make it very desirable as an energy source is that it has a near infinite energy density it is ubiquitous (i.e., present in outer space).

GRAVITY AND INERTIA

Haisch, Rueda and H. E. Puthoff, Ph.D. addressed the Inertia issue in a 1994 paper entitled "Inertia as a Zero-Point Field Lorentz Force," of inertia and associated it with Mach's Principle and the properties of the vacuum. It turns out that the quantum fluctuations of distant matter, (i.e., stars) structure the local-vacuum fluctuation-frame of reference. The implication for space travel is this: Given the evidence generated in the field of Cavity QED (discussed above), there is experimental evidence that vacuum fluctuations can be altered by technological means. Logic infers that in principle, gravitational and inertial masses may also be altered.

Quantum theory teaches us that empty space is not truly empty, but rather that it is a plenum filled with an (energetic quantum process). A process possessing profound implications for future communication systems, space travel, i.e. the selective design geometry or shape of future spacecraft endowed with the ability to interact directly with the vacuum. Thereby making it possible to extract and/or borrower energy from the environmental fields continuously fluctuating about their zero base-line values. Note: such activity remains even at absolute zero. Reflecting for a moment Einstein's general theory of relativity, forced to reverse his stand on space as a complete void and opt for a richly endowed plenum, named the space-time metrics

4. Description of the Prior Art

Thomas Young's Double Slit Experiment

In 1801, an English physicist named Thomas Young performed an experiment which explores how coherent light waves interact when passed through two closely spaced slits that strongly inferred the wave-like nature of light. Because he believed that light was composed of waves, Young reasoned that some type of interaction would occur when two light waves met.

Young's experiment was based on the hypothesis that if light were wave-like in nature, then it should behave in a manner similar to ripples or waves on a pond of water. Where two opposing water waves meet, they should react in a specific manner to either reinforce or destroy each other. If the two waves are in step (the crests meet), then they should combine to make a larger wave. In contrast, when two waves meet that are out of step (the crest of one meets the trough of another), the waves should cancel and produce a flat surface in that area.

In order to test his hypothesis, Young devised an ingenious experiment. Using sunlight diffracted through a small slit as a source of coherent illumination, he projected the light rays emanating from the slit onto another screen containing two slits placed side by side. Light passing through the slits was then allowed to fall onto a screen. Young observed that when the slits were large, spaced far apart and close to the screen, then two overlapping patches of light formed on the screen. However, when he reduced the size of the slits and brought them closer together, the light passing through the slits and onto the screen produced distinct bands of color separated by dark regions in a serial order. Young coined the term interference fringes to describe the bands and realized that these colored bands could only be produced if light were acting like a wave.

The success of Young's experiment was strong testimony in favor of the wave theory, but was not immediately accepted by his peers. The events in place behind phenomena such as the rainbow of colors observed in soap bubbles and Newton's rings (to be discussed below), although explained by this work, were not immediately obvious to those scientists who firmly believed that light propagated as a stream of particles.

Other types of experiments were later devised and conducted to demonstrate the wave-like nature of light and interference effects. Most notable are the single mirror experiment of Humphrey Lloyd and the double mirror and bi-prism experiments devised by Augustin Fresnel for polarized light in uniaxial and birefringent crystals.

Fresnel concluded that interference between beams of polarized light could only be obtained with beams having the same polarization direction. In effect, polarized light waves having their vibration directions oriented parallel to each other can combine to produce interference, whereas those that are perpendicular do not interfere.

5. Description of the Prior Art

A Resonator is defined as a condition in a circuit that converts energy from a potential form to a kinetic form. One example of a resonance in electronics is that of the L-C filter. As the capacitor discharges the inductor stores the energy, and as the inductor converts the magnetic energy into electrical energy, the capacitor charges up again. An oscilloscope can observe this action, with the resulting waveform having a distinct period. This repeating phenomenon is called a resonance. An Oscillator circuit is defined as "an electronic circuit that converts energy from a direct-current source into a periodically varying electrical output." [Parker, 1984]

Therefore, an oscillator takes a steady state signal, and using electrical behaviors of circuit elements, converts the signal into a periodic, time variant signal. This oscillation can be sinusoidal in appearance (sine wave oscillation), square waved, triangular waved, or any variety of repeatable signals.

6. Description of the Prior Art

Superconductivity

Superconductivity, phenomenon displayed by certain conductors that demonstrate no resistance to the flow of an electric current. Superconductors also exhibit strong diamagnetism; that is, they are repelled by magnetic fields. Superconductivity is manifested only below a certain critical temperature T_c and a critical magnetic field H_c, which vary with the material used. Before 1986, the highest T_c was 23.2 K (-249.8° C/-417.6° F) in niobium-germanium compounds. Temperatures this low were achieved by use of liquid helium, an expensive, inefficient coolant. Ultralow-temperature operation places a severe constraint on the overall efficiency of a superconducting machine. Thus, large-scale operation of such machines was not considered practical. But in 1986 discoveries at several universities and research centers began to radically alter this situation.

Ceramic metal-oxide compounds containing rare earth elements were found to be superconductive at temperatures high enough to permit using liquid nitrogen as a coolant. Because liquid nitrogen, at 77K (-196° C/-321° F), cools 20 times more effectively than liquid helium and is 10 times less expensive, a host of potential applications suddenly began to hold the promise of economic feasibility. In 1987 the composition of one of these superconducting compounds, with T_c of 94K (-179° C/-290° F), was revealed to be $YBa_2Cu_3O_7$ (yttrium-barium-copper-oxide). It has since been shown that rare-earth elements, such as yttrium, are not an essential constituent, for in 1988 a thallium-barium-calcium copper oxide was discovered with a T_c of 125K (-148° C/-234° F).

In comparing superconductor technology with present room temperature devices, the need for cooling cryogenic liquids and systems will still be needed and is a serious economic and technological disadvantage. There is a great difference between switching on a machine as needed and having to supply continuous refrigeration, or having to wait for refrigeration systems to reach operating temperatures

Superconductivity was first discovered in 1911 by the Dutch physicist Heike Kamerlingh Onnes, who observed no electrical resistance in mercury below 4.2 K (-268.8° C/-451.8° F) The phenomenon was better understood only after strong diamagnetism was detected in a superconductor by Karl W. Meissner and R. Ochsenfeld of Germany in 1933. The basic physics of superconductivity, however, was not realized until 1957, when the American physicists John Bardeen, Leon N. Cooper, and John R. Schrieffer advanced the now celebrated BCS theory, for which the three were awarded the 1972 Nobel Prize in physics. The theory describes superconductivity as a quantum phenomenon, which the conduction electrons move in pairs and thus show no electrical resistance. In 1962 the British physicist Brian D. Josephson examined the quantum nature of superconductivity and proposed the existence of oscillations in the electric current flowing through two superconductors separated by a thin insulating layer in a magnetic or electric field. The effect, known as the Josephson effect subsequently was confirmed by experiments.

Because of their lack of resistance, superconductors have been used to make electromagnets that generate large magnetic fields with no energy loss. Superconducting magnets have been used in diagnostic medical equipment, studies of materials, and in the construction of powerful particle accelerators. Using the quantum effects of superconductivity, devices have been developed that measure electric current, voltage, and magnetic field with unprecedented sensitivity.

The discovery of better superconducting compounds is a significant step toward a far wider spectrum of applications, including faster computers with larger storage capacities, nuclear fusion reactors in which ionized gas is confined by magnetic fields, magnetic levitation (lifting or suspension) of high-speed ("Maglev") trains, and perhaps most important of all, more efficient generation and transmission of electric power. The 1987 Nobel Prize in physics went to West German physicist J. Georg Bednorz and Swiss physicist K. Alex Muller for their discovery of materials that are superconductive at temperatures higher than had been thought possible

Engineering Methodology

I will herein describe my engineering methodology in a progressive manner common sense wise beginning with vortex mechanics comprising at least one pairs whereby any suitable pairs of said convergence forces rotary intermingle on a convergence intersection who's action forms at least one rotary vortex, a similar action reaction occurs between the upper most surface of a wing and the lower most surface of a wing which may shed a rotary vortex within a viscous fluid an idea that is presently rejected by conventional engineers as something to be avoided at all cost, but is utilized here in my innovation as a rotor or motor including the electromagnetic spectrum and its own electromagnetic frequency based viscosity and that of the vacuum of space which may also be perturbed in like manner either physically or electromagnetically or both in any suitable combination thereby yielding an energy source in the form of a renewable vortex rotor interaction be it a vortex of an electromagnetic frequency based viscosity or that of an atmospheric viscosity or that of a water based viscosity or the vacuum of space.

I herein combine the concepts of geometrically structured shapes with energy leverage concepts and the functionality of a turbo-charging unit with vortex mechanics with quantum mechanics with aerodynamics and electronics, specifically antenna technology whereby I have produced an electronic turbo charging unit and concepts and a renewable superconductive energy source and concepts while others in the art focus on one specific experiment wholly ignoring the real world mechanics and the applications of the technology, conversely I concentrated on the mechanics inventing and building working renewable energy devices and machinery from the physics at hand herein above as below disclosed a reverse engineering methodology.

Objects and Advantages

It is another object of the present invention to provide a system for converting zero point electromagnetic radiation energy to electrical energy.

It is another object of the present invention to provide a system for converting vacuum fluctuations to electrical and implosion propulsion

It is another object of the present invention to provide a system for converting electromagnetic radiation energy to electrical energy which may be used to provide such energy from any desired location on earth or in space.

It is another object of the present invention to provide a system for converting electromagnetic radiation energy to electrical energy having a desired waveform and voltage.

It is an object of the present invention to provide a robust system for converting electromagnetic radiation energy to electrical energy in order to enhance effective utilization of high energy densities of the electromagnetic radiation.

It is an object of the present invention to provide a system for converting electromagnetic radiation energy to electrical energy, which is simple in construction for cost effectiveness and reliability of operation.

It is an object of the present invention to provide a method of implosion propulsion.

Another object of the present invention is to provide a method of superconductive implosion propulsion based on quantum electro-dynamic vacuum fluctuations

It is another object of the present invention to provide a system for converting electromagnetic radiation energy having a high frequency to electrical propulsion energy.

Yet a further object of the present invention is to provide a method of transportation driven and or otherwise propelled via a superconductive quantum vortex implosion supporting at least one atom electrodynamic conversion to electrical and zero point energy

Other objects, methods, advantages and features of the present invention will become clear from the following detailed description of the preferred embodiments of the invention when read in conjunction with the lab report a species embodiment and drawings as well as append claims

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a plane view of the receiving structures and antenna array of a first embodiment of the system of the present invention comprising a schematic view of the receiving conducting and converting components of a implosion propulsion unit thereof.

FIG. 2 is a plane view of the receiving structures depicting a regenerative feed back loop and circuit through a tandem pair of backward wave or reverse wave radio cavity frequency amplifiers of an antenna array of a second embodiment of the system of the present invention with a schematic view of the components thereof also shown is Fig. 2a depicting alternative wiring diagram circuit 3a.

FIG. 3 is a perspective view of the receiving structures, antenna and waveguide of the second embodiment shown in FIG. 2 with a schematic view of the converter and propulsion unit thereof and also showing the incident primary and emitted secondary electromagnetic radiation.

FIG. 4 is a side view of the converter and propulsion unit mounted to a circuit board and a plurality of pairs of the receiving structures and a plurality of antennas of a third embodiment of the system of the present invention with a mechanical view of the conductors and converter and propulsion unit thereof and also showing the emitted secondary electromagnetic vortex radiation from the dielectric emitter plates.

FIG. 5 is a rear mechanical view of an optical atom coupled waveguide mounted on a sliding boom apparatus a loop accelerator antenna tank circuit consisting of a at least one set of spark gap electrode a tandem pair of reverse wave radio cavities and a pair of tandem dielectric plates also shown in Fig. 5 an optional horn feed and comprising components of the third embodiment of the system of the present invention.

FIG. 6 is a mechanical side view of the receiving structures and propulsion system of the present invention showing a tandem pair of dielectric plates with at least one surface of the dielectric plates shaped in a dome fashion.

FIG. 7 is a diagram of a resanent waveguide receiving structure system of the present invention showing an incident electromagnetic plane wave of light impinging on the optical receiving structures lens apertures and illustrating the direction of the electric and magnetic field vectors thereof showing the focal length of the light radiation hour-glass mode and a secondary wave emission from the slotted line antenna structures mortised through the lower most wall of the resonating cavity structure and shown in Fig.7a is a detail of the optical receiving structures.

FIG. 8 is a diagram of an optical atom coupled waveguide and a ferrite bead choke coil and a shading coil utilized in the system of the present invention.

FIG. 9 is a exploded view of a optical atom coupled waveguide and showing the location of four capasitive tuning screws (CTS) and two inductive tuning screws (ITS)

FIG. 10 is a mechanical view of a ferrite bead choke coil and deflection yoke showing the location of four safety spark gap adjusting screws.

FIG. 11 is a explode view of a lumped transmission line tank circuit comprising a set of dielectric component materials strategically stationed around the perimeter of the tank circuit loop accelerator antenna and spark gap transmitter

FIG. 12 is a exploded view thereof a tank circuit comprising a set of optional inductive tuning screws strategically stationed around the perimeter of the tank circuit loop accelerometer antenna and spark gap transmitter

FIG. 13 is a diagrammatic view of a spark gap electrode of a first embodiment used in the system of the present invention and attached with high voltage breaded wire thereof

FIG. 14 is a cutaway view of an improvement to the tank circuit comprising a waveguide structure built into the loop accelerator tank circuit spark gap transmitter

FIG. 15 is a cutaway view of an improvement to the tank circuit comprising a waveguide structure built into the loop accelerator tank circuit spark gap transmitter and showing a tank circuit loop antenna accelerator structure used in the present invention

FIG. 16 is structural view of a coaxial magnetron backward wave or reverse wave radio cavity showing a space charge or spoke wheel rotating around the cathode of a coaxial magnetron tube

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Referring now to Fig. 1 of the drawings, there is shown a schematic view of a circuit 2 comprising a type of antenna array for converting environmental energy into electrical and implosion propulsion push and pull thrust an inductive resanent capasitive atom coupled optical cavity waveguide 4 attached to a sliding boom Fig. 4, 6 mounted on a suitable base Fig. 4, 5. A feed horn 8 is supported at the central axis along a common boresight to permit precision mechanical alignment of said waveguide 4 and the feed horn 8 with the antenna array providing a means for receiving transmitting transceiving providing a sink and amplification but not by way of limitation vacuum fluctuations a polyphase counter clock rotating whistler wave the embodiment or generation of two or more phases EM RF light gamma photon atom comprising at least one highly squeezed hour glass mode of operation including the converting of zero point electromagnetic radiation to electrical and implosion propulsion energy and also showing a set of antenna probes 11 and 13 a radiating surface for the purpose of obtaining a directional response shown proximal to dielectric plates 12 and 14 of said circuit composed thereof:

Fig. 2 depicts a schematic view thereof a second and optional wiring schematic of the receiving structures showing a super-regenerative feed back loop in this new system the factors of the circuits are so arranged that the amplifying oscillations set up by the tube do not depend so much on the feedback oscillations as on those which the oscillator tube itself sets up. This is caused by alternating the values of positive and negative resistance from moment to moment; that is, an alternating positive and a negative resistance are set up by the oscillations of the oscillator tube and circuit 3a and 3b a tandem pair of backward wave or reverse wave radio cavity frequency amplifiers 7 and 9 comprising an antenna array of a second embodiment of the system of the present invention with a schematic view of the components thereof circuit 3 embodied in Fig. 2 comprising a type of antenna array for converting environmental energy to electrical and implosion propulsion push and pull thrust Fig. 2 an embodiment of the system of the present invention and shown in Fig.2a an alternative wiring scenario circuit 3a. the delta antenna 16 coils may be mounted within said radio cavities 7 and 9 and strap lines may be mounted around the anode of the cavities with a first wire strap lining the anode and connecting to a first side of a vacuum tube magnetron and a second wire attached to a second side of a vacuum tube magnetron whose wires are brought out from said coaxial magnetron tubes and attached to plate capacitors 12 and 14 by their edges and thereby energized in a direct manner verses mutual inductance as described in the article.

Fig. 3 is a schematic view thereof comprising an antenna array used in the present invention and also showing 1a the location thereof incident primary a counter clock rotating whistler wave and an optical aperture waveguide 4 comprising an atom trap wherein a step in a series of chain reactions occur within an antenna array system comprising an optical atom coupled waveguide composed of apertures of predetermined sizes shapes and dielectric materials holes for propagating but not by way of limitation electromagnetic waves and signals into and out of the waveguide comprising a radio cavity 4 thus coupling at least one atom into said resanent cavity 4 supporting at least one highly squeezed hour glass mode and coupling at least one atom therein (not shown) which may undergo a chain reaction thus be re-emitted as a secondary electromagnetic radiation a point source 2b and inductively energizing or ringing in tune with a deflection yoke K1 comprising a ferrite bead choke coil and Fig. 8 K a shading coil comprising a one way valve and set in close proximal to said resonate cavity 4 and safety gap system K1 thereby converting said point source into a spherical wave front Fig. 3 3c thus energizing a tank circuit loop antenna accelerator structure 15 set in proximal along a common boresight and tuned to the same frequency to ring at resonance thus converting said spherical wavefront 3e emitted by said deflection yoke K1 and 15 re-emitted as 4e an interfering wave pattern and electromagnetic implosive vortex suction heads 5f and 5g and 6h and 6l a hyperbolic spiral wave form and beat frequency consisting of twin tandem reverse waves 6h and 6l and a spike wave train 1s and 2s a twin out of phase spike wave train for the purpose of imitating the diamond lattice or scalar wave grid pattern diamond lattice each atom is connected to all other atom's covalent bonds in an orderly arrangement conceptualized as a diamond lattice or grid pattern in other words zero point energy the fabric of space and forming at least a portion of a square wave 1s and 2s comprising a secondary radiation composed of zero point energy 17 and in the proper phase when the waves 4e from the spark gap transmitter 15 or loop accelerator encounter the fields of the delta antenna 16 comprising a delta triangular antenna section for matching a feeder line at its connection to a radiator thereby providing the condition for maximum power transfer and the waves of a common drift region delta-T 16a and 16d an archimedes spiral coil and the waves emitted by 16b a paraboloid dish antenna and the reverse waves of the radio cavities 6h and 6i and the spike wave trains 1s and 2s the delta antenna 16 and the radio cavities 7 and 9 change from an oscillator to an emitter and begin emitting energy which can only occur when the fields around an antenna are given a reverse or backward traveling-wave field 6h and 6i which provide the necessary stimulation thus causing secondary emissions to occur in the local region of space 17 showing a coherence of vacuum fluctuations a gravitational collapse pinch or highly squeezed region of the curved time matrix in three dimensional space of the near and far field 17 radiation patterns absorption and or emission require both the trapped fields 4e at the delta antenna 16 with the trapped fields of coils 16a and 16d and vortex fields of 16b composed of fields 17 as well as the hyperbolic spiral or

backward wave fields emitted from the reverse wave cavities 6h and 6i a hyperbolic spiral wave form which contain an ignition spike 1s and 2s comprising at least a portion of a square wave or arc emitted by the RLC loop antenna 15 accelerator and its spark gap 4s discharge arc 4e an interfering wave pattern or form the best demonstrations of rf electrical power available from the solar winds or electromagnetic spectrum is received power vs. rf frequency for experiments using ground based high power high frequency transmitters to perturb the ionospheric medium the highest peak on the scope indicates the MHz in rf pump energy from the antenna and transmitter system used in the present invention other peaks are due to interference signals the main signal of interest is the broad shoulder of energy produced by the dielectric materials of 12 and 14 which produce an electromagnetic vortex implosion 5f and 5g and also an overshoot repulsive wave form designated OSW1 and OSW2 the momentary increase of a quantity beyond its normal maximum value e.g., the spike seen on a square wave due to the over swing of a rising voltage and a nodule (not shown) in a planar pattern describing radiation as for antennas a small peak aligned in a direction other than that of a main lobe and or an antinode (not shown) a point of maximum amplitude in a standing wave; e.g., current node and the waves 5f and 5g which may be seen on the scope to the right or left of the peak I should point out that the bandwidth of the broad shoulder 5f and 5g is many times the bandwidth of the perturbing signal 2b peak the concept of this invention is to provide a reflecting system that will allow this broad shoulder 5f and 5g of energy to cascade into a stable resonant flow between the environment and a reflector system. Once a resonance composed of a continuous echo is established the reflected energy will provide the perturbing radiation for stimulated emission and constructive interference entrainment with the electrical wave energy present within the environment as used in an embodiment of the system of the present invention

Fig. 4 is a mechanical view of said components as hereinbefore described above in FIGS. 1 and 2 and 3 comprising an embodiment of the system of the present invention Fig. 4 and also showing the antenna array as used in the invention mounted on a two level base 5 or circuit board also showing a tandem electromagnetic vortex implosive suction head 5f and 5g emitted by the dielectric material of components 12 and 14 depicted in an embodiment of the system of the present invention thereof said system also 2 includes a first means for receiving but not by way of limitation at least one atom supporting at least one highly squeezed hourglass mode a second third forth fifth and sixth seventh eight ninth means for receiving incident primary and secondary electromagnetic radiation the means of implosion propulsion 12 and 14 are preferably a pair of dielectric plate structures which are preferably composed of a dielectric material.

Alternatively, the plates 12 and 14 may be cubical structures or any other suitable shape. The plates 12 and 14 may be mounted on a suitable foundation by any suitable mounting means (not shown), or plates 12 and 14 may be suspended from a suitable foundation by any suitable suspension means (not shown). I should point out that mechanical forces do become significant in resonant EM systems. Normal transformers and capacitors certainly do undergo significant mechanical forces the plates 12 and 14 are preferably composed of a dielectric material. The dielectric plates 12 and 14 scatter and concentrate electromagnetic waves in the form of hyperbolic spiral or vortex formations. At very sharply defined frequencies, the plates 12 and 14 will have resonance's wherein the internal energy densities can be several orders of magnitude larger than the energy density of the incident electromagnetic field driving the plates 12 and 14. At resonance, the electromagnetic stresses, equivalent to pressures proportional to the energy density, can cause material deformation of the plates, 12 and 14 which produce a secondary electromagnetic field. The plates 12 and 14 are preferably positioned proximal to each other, as shown in FIGS. 1 2 3 4 5 and 6. Although the proximity of the plates to each other may adversely affect the resonances if placed in to close a proximity to one another, the very high "Q"s of the isolated dielectric resonances results in such adverse affect being relatively small. However, the proximity of the plates 12 and 14 allows the plates to interact electromechanically which increases the magnitude of the secondary radiation emitted therefrom. The electromagnetic radiation incident upon the plates 12 and 14, which drives the plates to resonance, is preferably zero point radiation 17 however, other types of electromagnetic radiation may also be used to drive the plates 12 and 14, if desired. The effect of a dielectric plate such as 12 or 14 on an incident electromagnetic radiation such as a plane wave thereof is shown in FIG. 3 The plane wave propagates in the z axis direction (not shown) and is diffracted by the plates 12 and 14 resulting in scattering thereof. This scattering is commonly referred to as Mie scattering but generally comprises an electromagnetic vortex structure. The incident radiation wave has an electric vector component which is linearly polarized in the x axis direction and a magnetic vector component which is linearly polarized in the y axis direction (not shown). An electromagnetic wave incident upon a structure produces a forced oscillation of free and bound charges in synch with the primary electromagnetic field of the incident electromagnetic wave the movements of the charges produce a secondary electromagnetic field both inside and outside the structure.

The secondary electromagnetic radiation comprising this secondary electromagnetic field is shown in FIG. 3 and designated by the numerals 2b 3c 4e 5f 5g 6h 6i and 17 an antenna which is shown simply as a loop antenna 15 but may also be any other suitable type of antenna is also shown in FIGS. 1 2 3 4 and 6 and FIGS. 11, 12 and Fig.15 and designated by the numeral 15. The mutual interactions of the plates 12 and 14 produces interference between the secondary electromagnetic radiation 4e 7 and 6h and 9 6l thereby producing a beat frequency radiation 6a 6i and 17 which is preferably at a much higher frequency than the primary radiation 1a and 2b and the beat frequency radiation of 4e which is produced by resonant rise in the loop antenna accelerator tank circuit 15 is desired for conversion into electrical energy because it preferably is within the frequency range of RF radiation which may be converted into electrical energy by generally conventional systems that is a spark gap arc. Thus, the radiation 3c received by the antenna 15 is fed via an electrical conductor 15 to a means for converting the beat frequency radiation 4e to electrical energy. This means for converting is designated by the numeral 4s and preferably includes a tuned or tunable tank circuit.

Fig. 5 is a rear mechanical view of an optical atom coupled waveguide 4 supporting at least one highly squeezed hourglass mode and supporting the coupling of at least one atom into said waveguide suitable for at least one or more chain reaction to occur said waveguide 4 is shown mounted on a sliding boom apparatus 6 suited to mechanically adjust said waveguide 4 also shown in Fig. 5 is a deflection yoke (K1) comprising a ferrite bead choke coil and safety gap system whose purpose is to receive a point source 2b and to reemit same as a spherical wave front thereby charging a loop accelerator antenna 15 a tank circuit comprising at least one set of spark gap electrode 4s and thereby energizing a tandem pair of reverse wave radio cavities 7 and 9 and a delta coil and dish antenna (not shown) and a pair of tandem dielectric plates 12 and 14 this forming a implosion propulsion system also shown in Fig. 5b an optional horn feed tapered waveguide 8b but not by way of limitation said horn feed 8 and 8b my be of any type that is suited to guiding electromagnetic waves into the optical waveguide cavity and well know to those skilled in the art and comprising components of a preferred embodiment of the system of the present invention.

FIG. 6 is a mechanical side view of the receiving structures and propulsion system of the present invention shown mounted on a suitable nonmetallic circuit board 5 and showing an optical waveguide 4 a sliding boom 6 a horn feed 8 a deflection yoke K1 and spark gap electrodes 4s a loop antenna or induction coil tank circuit 15 a tandem pair of backward wave radio cavities 7 and 9 a tandem pair of dielectric plates 12 and 14 with at least one surface of the dielectric plate 12a and 14b shaped in a dome or triarc fashion a paraboloid dish antenna 16b and a delta antenna 16 and archimedes

spiral coil 16a and 16d forming an edge tone oscillator between the drift region thereof 7 and 9 of the radio cavities said archimedes spiral coil 16a and 16d which is forming an edge tone oscillator circuit between the drift region of said backward wave radio cavities 7 and 9 may also be a strap line coil (not shown) mounted on the anode structures inside of said coaxial magnetron cavities 7 and 9 and well know to those versed in the art of radio cavity structures therein.

Fig. 7 is a diagram and cutaway end view of the electric field vector wall (not shown) of the resanent cavity showing a resanent waveguide receiving structure 4 a wing or grounding structures designated GPW 1 and GPW2 in an antenna or other radiator, a (usually flat) member attached to, and sticking out from, another member such as a grounding plane of the system of the present invention also showing an incident electromagnetic plane wave impinging on the optical receiving structures 8d and 8e and aperture 8f and apertures 8g and 8h (not shown) also showing aperture 8l a rectangular aperture but not by way of limitation said aperture my be any suitably shaped or sized aperture excised through the back wall of said waveguide back wall designated (BW) and illustrating the directions of the electric and magnetic field vectors (not shown) therein and showing the focal length of the light radiation 8j and 8k and a secondary interfering wave emission 1 passing through and emitted by said slotted line antenna structures 8a and 8c mortised through the lower most wall of the resonating cavity structure designated LW with electromagnetic rays being passed through a double slit

comprising a lens aperture or coaxial lens optical structure herein described above and below and passing through a screen but not by way of limitation lens apertures 8d and 8e to produce coherent light or electromagnetic radiation. This light is then projected onto another screen that has twin (or double) slits 8a and 8c, which again diffracts the incident illumination 1 as it passes through. The results of interference between the diffracted light beams can be visualized as light intensity distributions the coherent wavefront of light impacting on the twin slits is divided into two new wavefronts and dispersed along the magnetic field vectors designated MFV2 and MFV3 that are perfectly in step with each other. Light waves from each of the slits 8a and 8c must travel an equal distance and reach said slot line 8a and 8c slit points still in step or with the same phase displacement.

Because the two waves reaching said slot line slit points possess the necessary requirements for constructive destructive interference, they add together to produce an interference fringe on the screen LW through said slotted line antenna 8a and 8c slit structures of 4 the waveguide

Fig. 7a depicts a view of an optical lens detail as used in the present invention comprising a multielement lens structure thus forming an integral design step in an optical cavity which allows considerable flexibility in realizing a cavity having a large g factor and a large active volume simultaneously that supports multiple lambda scale waist hour glass modes over a large active volume the cavity is comprised of two coaxial lens reflectors each consisting but not by way of limitation of a double lens whose external convex surface may have a reflective dielectric coating or a low reflectivity dielectric coating (R = 0.85) which may be applied to the external convex surface ensuring a sufficiently broad cavity resonance at full working aperture of the cavity resonance off axis on axis source points couple to modes resembling those shown in Fig. 7 8j and 8k diffraction limited self-imaging is achieved over an active region of a predetermined diameter of the effective focal length of the working aperture diameter of the lens reflector 8d and 8e the cavity free spectral range the end to end optical path length at lambda = a predetermined nm where c is the speed of light. A well known cavity QED effect is the modification of atomic spontaneous emission The largeness of my cavity bandwidth relative to g leads me to expect atoms within the active volume of said cavity and to display exponential spontaneous atomic decay with a rate that is predetermined by size and shape of the focal length of the lens apertures and cavity structure as well as the size and shape of the propagation of said apertures in said cavity are advantageously effected by component techniques that are familiar to the person skilled in the art, for example methods similar to that described in the article:

FIG. 8 is a mechanical diagram view of an optical atom coupled waveguide comprising an atom trap as used in the present invention and also showing a ferrite bead choke coil a deflection yoke and safety gaps and a shading coil used as a one way valve and similar in function to a solenoid and is utilized in the system of the present invention herein set forth above as below and designated alphanumerically:

a horn feed 8 a waveguide flange A1 a flat lip like fitting at the end of a waveguide pipe which serves to fasten wave guide sections together or to attach a wave guide component equipped with an identical flange to the end of a wave guide (not shown) a waveguide resonator a waveguide section 4 employed as a cavity resonator waveguide and composed of apertures Fig. 8 B1 8g 8h composed of dielectric materials lens apertures 8d and 8e and B1 8g 8h are holes for propagation and the transmission of electromagnetic energy through and into and out of said waveguide by successive reflections between the waveguide and the inner walls a choke flange C at the end of a wave guide a flange in which a groove forms a choke joint and connecting two wave guide sections together and permitting efficient energy transfer without requiring electrical contact with the inside wall of the waveguide a wing or grounding plane;

FIGS. 7 and 8 GPW1 and GPW2 in an antenna or other radiator a usually flat member attached to and sticking out from another member such as a grounding plane a waveguide lens 8d and 8e a microwave or optical lens comprising a waveguide section which provides the required phase shifts a waveguide slotted line antenna Fig. 7 and Fig. 8 comprising a section of waveguide composing a slotted line antenna 8a and 8c forming a dipole trap thereby effectively trapping and or couple an atom or multiples of atoms within said resonant cavity a shadow area J the vicinity in which signal attenuation or the absence of a signal results from the shadow effect a shadow attenuation the attenuation of electromagnetic energy caused by an obstacle generally measured in decibels the simulation of energy caused by the curvature of said obstacle shadow effect the obstruction of radio waves by objects in their path shadow medium a shadow whose width is proportional to current a shading coil a single short circuited turn copper ring K encircling the tip of the core of an AC carrying coil such as the field pole of a motor K-1 a choke coil a current induced in the coil causes a momentary flux shift that approximates a rotating field which self starts a simple single phase induction capacitance motor whose materials comprise a choke coil to restrict or curtail passage of a particular current or frequency by means of a discrete component such as a choke coil or a deflection yoke a ferrite bead choke coil comprising a magnetic storage device or material in the form of a bead slipped over current caring leads to choke out rf a deflection yoke the ferromagnetic ring or cylinder which holds the pole pieces of a dynamo type generator and acts as part of the magnetic circuit a system of coils employed for magnetic deflection of the electron beam source Fig. 3 2b.

FIG. 9 is a exploded view of a optical atom coupled waveguide as used in the present invention and showing the location of four capasitive tuning screws designated (CTS 1, 2, 3, 4) and two inductive tuning screws designated (ITS 1 and 2)

FIG. 10 is a mechanical view of a ferrite bead deflection yoke and coil K1 as used in the present invention and showing a safety spark gap electrode system designated SG spark gap mounted there on an adjustable non metallic backing plate designated BP backing plate of which three sets of four such safety gap electrodes are shown and also showing the non metallic adjustment screws designated AJS means to set the spark gag and backing plate settings by adjustment screws as used in the present invention

Fig. 11 is a explode view of a loop antenna accelerator tank circuit 15 and spark gap electrodes 4s as used in the present invention comprising a set of dielectric component materials PTC1 PTC2 PTC3 PTC4 PTC5 PTC6 or pass through capacitors a lumped element pertaining to a property that is concentrated at or around a single point rather than being distributed through a circuit

Fig. 12 is a explode view of a tank circuit 15 as used in the present invention comprising a set of optional inductive tuning screws lumped inductance ITS1 ITS2 ITS3 ITS4 and ITS5 strategically stationed around the perimeter of said tank circuit loop accelerator 15 antenna and 4s a spark gap transmitter also showing a pass through capacitor composed of dielectric material

Fig. 13 is an adjustable sphere gap electrode composed of two metal balls separated by a small air gap a high voltage applied to the electrodes causes a spark or in the case of an ac voltage a train of sparks to jump across the gap a spark gap oscillator comprising spark gap 4s and a tuned LC tank circuit 15 (not shown) or damped wave oscillator Fig. 13a is a detail showing a breaded high voltage transmission line designated HVTL electrically connecting said tank circuit 15 (not shown) to said spark gap electrodes 4s as used in the present invention

Fig. 14 is a cut away view of an improvement to the loop antenna accelerator tank circuit 15 (not shown) comprising a waveguide structure Fig. 14 built into the loop accelerator 15 (not shown) of the tank circuit spark gap transmitter 4s (not shown)

Fig. 15 is a cutaway view of said improvement depicted in Fig. 14 to the tank circuit loop accelerator 15 comprising a waveguide structure built into the loop accelerator tank circuit spark gap transmitter and showing said tank circuit loop antenna accelerator structure used in the present invention Inside the accelerator structure the electromagnetic waves from 3c Fig. 3 set up currents in the copper that cause oscillating electric fields pointing along the accelerator as well as oscillating magnetic fields in a circle around the interior of the accelerator pipe such that the electrons arrive in each cell or cavity of the accelerator just at the right time to get maximum push and pull from the electric field in the cavity said electrons must arrive when the field is pointing the opposite way to be pushed or pulled in the same direction the size of the cavities in the accelerator are matched to the wavelength of the electromagnetic waves of 3c Fig. 3 so that the electric and magnetic field patterns repeat every three cavities along the accelerator in principle electron bunches follow one another three cavities apart the spacing between said bunches are always kept in multiples of three cavities for the same sign particles

Fig. 16 is a structural view of a reverse wave radio cavity showing a space charge or spoke wheel rotating around the cathode of a coaxial magnetron tube Fig. 16c is a magnetron tube detail comprising a set of permanent magnets designated PM a cavity comprising a backward wave crossed field microwave frequency amplifier designated CFA composed of an anode cavity Fig. 16 and pins (not shown) forming the resonator circuits the cavities and excited in opposite phase by a strap line (not shown)

comprising the delta antenna coil 16 and 16a shown in FIGS. 1 3 4 and 6 composed of either or both strap line or edge tone oscillator the nucleus of the high voltage system is the magnetron tube which is a diode type electron tube used to produce the required beat frequency energy it is classed as a diode because it has no grid as does an ordinary electron tube a magnetic field imposed on the space between the anode plate and the cathode serves as the grid while the external configurations of different magnetrons will vary the basic internal structures are the same these include the anode the filament or cathode the antenna and the magnets the theory of magnetron operation is based on the motion of electrons under the combined influence of electric and magnetic fields for the tube to operate electrons must flow from the cathode to the anode under these fundamental laws that govern their trajectory as electrons flowing through a conductor cause a magnetic field to build up around that conductor so an electron moving through space tends to build up a magnetic field around itself on one side of the electron's path this self induced magnetic field adds to the permanent magnetic field surrounding it on the opposite side of its path thus having the opposite effect subtracting from the permanent magnetic field and is therefore weakened and the electron's trajectory bends in that direction resulting in a circular motion travel by the electrons accelerating to the anode.

The whirling cloud of electrons influenced by the high voltage and the strong magnetic field form a rotating pattern that resembles spokes in a spinning wheel Fig. 16 the interaction of this rotating space charge wheel with the configuration of the surface of the anode produces an alternating current flow in the resonant cavities of the anode as a spoke of electrons approaches an anode vane the segment between two cavities it induces a positive charge in that segment as the electrons pass the positive charge diminishes in the first segment while another positive charge is being induced in the next segment current is induced because the physical structure of the anode forms the equivalent of a series of high Q resonant inductive capacitive LC circuits and is otherwise well know to persons in the art as a coaxial magnetron tube

This section below describes the system used in the present invention as a superconductive implosion propulsion energy source used in the present invention as a spacecraft or aircraft

The system of the present invention may become a super conductive implosion propulsion system through a multifold process means for receiving for borrowing and converting said atom coupled electromagnetic energy extracted from within an environment means to amplify said environmental energy and return said energy back into said environment without loss of said energy therein

beginning with an inductive application of electromagnetic energy induced through the dielectric materials of 12 and 14 and comprising a form of propulsion known as implosion which is in the form of an electromagnetic vortex or suction head 5f and 5g having both a pull and a push thereby mechanically comprising an implosive pull and an explosive push whereby a broad shoulder of energy may cause the formation of an overshoot wave such as square wave or over swing wave of energy OSW1 and OSW2 to occur in the vicinity of the dielectric materials of 12 and 14 located on the thrust or explosive push side of 12 and 14 and located at OSW1 and OSW2 and also exhibited by said broad shoulder of energy is a node and or antinode and or may be composed of nodules of iron oxides particles or any suitable composition including a ceramic composition comprising a predetermined compound which may protrude above the surface of the magnetic field of 12 and 14 it is therefore an object of my invention to provide an apparatus for converting the energy of an electrical potential Fig.3 15 4s and 4e directly into a mechanical implosive force 17 5f and 5g suitable for causing relative motion between a structure and the surrounding medium another object of this invention is to provide a novel apparatus for converting an electrical potential directly to usable kinetic energy to provide a novel apparatus for converting electrostatic energy directly into kinetic energy to provide a vehicle motivated by electrostatic vortex energy Volume II FIGS 1-6 vacuum cohesive vehicle VCV:

without the use of moving parts to provide a self propelled vehicle without moving parts to provide an apparatus for producing relative motion between a structure and the surrounding medium said apparatus includes a pair of electrodes (Volume 1) Fig. 3 4s of appropriate form held in fixed spaced relation to each other and immersed in a dielectric medium and oppositely charged another feature of my invention is to provide a source of high electrical potential connected between the body of the craft and the environment and the propulsion system via harmonic or inductive means said electromagnetic implosive vortex energy is reproduced throughout the system of the present invention by the function of the QED implosion system and predetermined sets throughout the electromagnetic functionality of said QED implosion system comprising additionally a triune vortex implosion which is set into motion as a direct result of the geometric shape of the vacuum cohesion craft designated VCV (Volume II. FIGS. 1 2 3 4 5 and 6) a ram induction impeller a first vortex implosion is encountered by said QED implosion unit in the form of a whistler or scalar wave (not shown) which is impinging on the surface of the horn feed waveguide (Volume I FIGS. 1 2 3 4 5 5b and 6 8 and 9) comprising a polyphase counter clock rotating wave (not shown) a second and third vortex implosion occurring within said optical cavity (Volume I Fig. 7 8j and 8k) in the form of light passing through the tandem set of lens apertures and polarizing or phase shifting therein said resanent cavity a forth and fifth electromagnetic vortex implosion;

comprising a tandem pair of reverse waves Volume I Fig. 3 6h and 6i composed of a spike wave train 1s and 2s are formed by the function of the reverse wave radio cavities 7 and 9 which combine to form a sixth electromagnetic vortex implosion 6h and 6i and beat frequency a seventh and eight vortex implosion occurring there at the dielectric materials of 12 and 14 a ninth vortex implosion occurs there at the delta antenna 16 and paraboloid dish 16b both inside the craft and outside the craft there in free space and 17 showing a highly squeezed or pinched curved spacetime matrix comprising a gravitational collapse and a triune atmospheric vortex implosion may occur by the forward motion and geometric shape of the VCV craft (Volume II Fig. 2 48, 48a and 48b an atmospheric vortex formation is caused by a reverse wave paraboloid impression of a predetermined size and shape designated 49 there in the nose cone section of (Volume II FIGS. 2, 4 and 7) of said craft and other vortex formations occur there in:

(Volume II Fig. 2) at the wing tip vortex generators 26 and 27 said vortex formation which is occurring there in the atmosphere may be generated by the geometric shape of the craft as well as the vortex formations generated by the QED implosion propulsion unit within the electromagnetic spectrum and/or environment play a major roll in the generation thereof a harmonic cooling which is prereqrasit for the occurrence of superconductive phenomenon displayed by certain compositions of conductors that demonstrate no resistance to the flow of an electric current superconductors also exhibit strong diamagnetism that is they are repelled by magnetic fields superconductivity is manifested only below a certain critical temperature T_c and a critical magnetic field H_c, which may vary with the material used ultralow temperature operation places a severe constraint on the overall efficiency of a superconducting machine cryogenic liquids and systems needed for cooling is a serious economic and technological disadvantage there is a great difference between switching on a machine as needed and having to supply continuous refrigeration or having to wait for refrigeration systems to reach operating temperatures however this is not the case with the VCV craft Volume II and QED implosion propulsion system Volume II due to the rotation of both electromagnetic and atmospheric vortex action setting into motion a cooling effect which is manifest and leveraged from the direct action of the atmospheric harmonics as well as the rotary vortex of the atmosphere and the action of the electromagnetic vortex rotary which set up a thermal acoustic effect and was first observed centuries ago by glass blowers, they noticed that the tube attached to a hot expended glass bowl would tend to cool and begin singing the first demonstration of the reverse process with sound used to pump heat for cooling was in 1982 when physics professor Stephen Garrett and his colleagues at the naval postgraduate school in Monterey California figured out a away to cycle a standing sound wave into an efficient system for refrigeration

Thermoacoustic refrigeration systems have been tested on the space shuttle and used for surveillance satellites whose equipment require very low temperatures as do superconductors and the function of the QED propulsion unit by doping the local drift region of the environment outside the craft and the ceramic material with ionization contained within a plasma vortex which is diffused around the perimeter of the VCV craft by the diffusion pattern (Volume II Fig. I 22a a quadratic diffusion cell resembling a waffle pattern):

thermoacoustic alternative vortex refrigeration is powered by standing sound waves caused by a temperature gradient which may set up a sound wave causing an interaction between the atmosphere and horizontal vortex chamber to harmonically sing or whistle this new refrigeration technique is decidedly low-tech however practical for producing ambient temperature superconductive devices a predetermined frequency comprising a standing wave note at just the right frequency to set up a standing wave of sound causing environmental cooling via vortex possessing a predetermined atmospheric pressure the sound waves cause the atmospheric gas to go through cycles of compression and expansion which is a key factor to acoustic cooling because gas heats up a bit when compressed and cools as it expands when a compression phase of the sound wave comes along the gas molecules of the atmosphere collide within said vortex and the Volume II VCV vacuum cohesion vehicle hull structure from which it radiates away then the gas expands and cools further than it would otherwise and some of its heat has been drawn off the process a progressive cooling which can be exploited for refrigeration the result is a refrigerant system that uses no ozone depleting CFCs and has only one moving part the environment it is the direct manipulation of said environment that conveys the craft along with its relative motion the only issue keeping the acoustic refrigeration system from producing an ambient temperature super conductor is a lack of interdisciplinary talent the people who do cryogenics don't know acoustics maybe this is the reason why there has been so little advancement in the art of ambient temperature super connectivity and when current is applied to the ceramic composition of the VCV aircraft Volume II standing sound waves get compressed and heat up nearby atmospheric molecules these atmospheric molecules collide and transfer some of their heat and cool down a bit after expanding the atmospheric molecules end up with less heat energy and are cooler than when they began the cycle researchers have already built a number of working acoustic coolers some capable of producing temperatures of around minus 100 degrees fahrenheit and have even been used aboard the space shuttle because they have fewer moving parts than conventional cooling systems acoustic coolers may well be suited to applications on satellites and space vehicles and even for ambient temperature super conductors where efficient maintenance free cooling is crucial

SUMMARY OF THE INVENTION

The present invention

It is a principle object of the present invention to provide a system for converting cavity quantum fluctuations to achieve large atom-light coupling strengths strong atom-light coupling means for coupling a single atom, which may significantly influence the quantum statistical properties of the electromagnetic field inside the optical atom coupled waveguide resonator. It also means that a single photon inside the cavity can now strongly affect the behavior of one or several atoms to convert electromagnetic radiation energy to electrical and/or to electromagnetic and/or to vortex propulsion energy comprising a superconductive implosion propulsion method of transport.

Optical excitation provides an important means of controlling the internal state of quantum systems. This is particularly true in transient settings where pulsed excitation allows for detailed quantum state preparation. A vital gauge or measure of the effect of an optical pulse on a resonant two-level system is given by the quantity known as area or the time-integrated product of signed optical field and atomic transition matrix element. Control over the area of an optical pulse implies control over its effect on an atomic specimen. Ordinary sources of optical pulses do not provide for direct control over area--secondary quantities such as power, temporal waveform and temporal duration must be monitored and manipulated.

It has been demonstrated that a rapidly decaying cavity can be employed to dramatically accelerate the rate of Dicke superradiance in optically thin samples. Superradiance involves a natural coupling between optical fields emitted and the internal state of atoms involved. That atom-cavity property of transforming input optical pulses of arbitrary area to output pulses having quantized or discrete areas. Optical sources are important to areas such as quantum state preparation, quantum computing and coherent control.

Cavity atoms experience significant squeezing under the influence of strong driving fields. These squeezing effects are intrinsically connected to the polarization of dressed state populations by tuning the cavity appropriately close to the atomic transition frequency we may induce a non-vanishing inversion of the dressed-state's setting the standard for optimal conditions for atomic squeezing.

In the case of an isolated two-level atom, the most important damping mechanism is a spontaneous radiative decay.

This mechanism is associated with the coupling of the atom to the zero point electromagnetic fields empty-cavity transmission resonances are found to split in the presence of the atoms and under these conditions the cavities temporal responses are found to be oscillatory. These effects may be viewed as a manifestation of a vacuum-field Rabi splitting or as a simple consequence of the linear absorption and dispersion of the intercavity atoms.

Interesting aspects of atomic behavior in the presence of strong driving fields appear when the driven atom resides not in free space, but in a region (such as an optical cavity) that displays a frequency-dependent photon-mode density. Under such conditions, it is found the strong driving fields can modify the spontaneous decay properties of an atom thereby give rise to interesting new features in the spectrum of strong-field fluorescence.

It is also found the high-level dressed-state polarization can be maintained in a sample of resonantly/nonresonantly driven atoms by appropriate tuning of an enclosing cavity. Furthermore, for appropriate RF frequencies and cavity tunings it is found that the atomic state becomes highly squeezed. In the course of analyzing these effects, a set of modified Bloch equations is derived that explicitly accounts for the finite response time associated with a frequency-dependent photon-mode density.

Essentially, the system of the present invention utilizes a set of rf cavities disposed in tandem with one another an antenna array structure optical atom-coupled waveguide for receiving incident electromagnetic radiation which may be propagating through a vacuum or any other medium in which the receiving structures may be suitably located. The system of the present invention is specifically designed to convert the energy of zero point electromagnetic radiation; however, it may also be used to convert the energy of other types of electromagnetic radiation including but not by way of limitation atom gamma photon light rf acoustic vacuum.

A tank circuit comprising a spark gap transmitter is an integral part of the conversion process, which converts the received energy to useful electrical energy. The converter preferably includes a tuning circuit or comparable device so that it can effectively receive the resanent radiation oscillation emissions produced in conjunction with the optical atom-coupled waveguide and ferrite bead choke coil a deflection yoke and shading coil resonator a one-way valve and that of incident environmental energies.

The receiving structures of the implosion-propulsion system are preferably composed of dielectric material in order to diffract and scatter to couple to external bodies the incident

electromagnetic radiation capable of coupling to external bodies. In addition, the receiving structures are of a volumetric size selected to enable the structures to resonate at a high frequency of the incident electromagnetic radiation based on the parameters of frequency of the incident radiation and propagation characteristics of the medium and of the receiving structures.

Since zero point radiation has the characteristic that its energy density increases as its frequency increases, greater amounts of electromagnetic energy are available at higher frequencies. Consequently, the sizes of the structures are preferably miniaturized in order to produce greater amounts of energy from a system located within a space or area of a given size. In this regard, the smaller the size of the receiving structures, the greater the amount of energy that can be produced by the system of the present invention.

At resonance, electromagnetically induced material deformations of the implosion propulsion receiving structures produce secondary fields of electromagnetic energy therefrom which may have evanescent energy densities several times that of the incident radiation capable of coupling with external bodies. The structures are of different sizes and shapes so that the secondary fields arising therefrom are of different while adding constructively in frequency. The difference in volumetric size and the proximal zones are very small so that interference between the emitted radiation fields, and the receiving structures at the two different frequencies produces a beat frequency radiation, which has a much higher frequency than the incident radiation the beat frequency radiation preferably is at a frequency that it may be relatively easily converted to a useable reverse wave and electrical-implosion-propulsion energy of a higher energy density having a desired voltage and waveform.

Note: Incident zero point radiation has its desirable high energy densities at frequencies which are so high that conventional systems for converting the radiation to electrical energy either cannot effectively or efficiently convert the radiation energy or simply cannot be used to convert the radiation energy for reasons beyond usual methods.

The system of the present invention also includes an antenna, which receives the beat frequency reverse wave radiation. The antenna may be a conventional metallic antenna such as a loop or dipole type of antenna or a rf cavity structure that partially encloses the receiving structures or of any type antenna that meets or exceeds the impedance matching criteria of systems requirements. The antenna feeds the radiation energy to an electrical conductor (in the case of a conventional dipole or comparable type of antenna) or to a waveguide (in the case of a rf cavity structure).

The conductor or waveguide feeds the electrical current (in the case of the electrical conductor) or the electromagnetic radiation (in the case of the waveguide) to the environment and from the environment back into said antenna and amplification beat-frequency-recycling-system via english a backward wave structure a reverse wave stimulated emission circumspect to an antenna or antenna arrays unique ability to resonate transmit and too receive simultaneously

The invention further consists in a method of manufacturing a component of this kind comprising the following steps:

Usual aircraft construction methods and materials applicable to the aerospace industry including superconductive ceramic compositions of materials and usual electronic methods and materials including antenna array designs applicable to the electronic and aerospace industries and all such materials are indigenously available.

Electronically speaking the construction of my invention is straightforward my invention employs an all inductive method of energizing the system thereby preventing losses due to restrictions and or heat with only one exception said reverse wave or co-axial magnetron tubes may become heated however the rest of the system operates in a cold fashion due in part to the lack of direct connections in other words I am utilizing antenna propagation as a transceiver or reception and transmission of EM, light, RF resanent energy to accomplish the interconnectivity of the circuit. Said system consist of several different antenna design collectively comprising an antenna array orientation thereby manifesting into an all induction circuit self energized via resonant rise oscillations and atoms scavenged from the electromagnetic spectrum existing there in free space.

A low pressure sink of electromagnetic vortex energy is created at the parabolic dish by reflection of energy and delta antenna which may be inductively connected or strap lined into a set of twin reverse wave cavities said energy sink is blocked open in one direction by the shading coil mounted to the end of the yoke deflection coil. This implies that there is a specific frequency at which the unit operates that is to say the atomic transition frequency thus its resonant frequency

There is a special frequency targeted in the design known as the atomic transition frequency. A complex cavity QED waveguide and network determines this resonant frequency.

To get the cavity QED Inverter to resonate atom, gamma, photon, light, ZPE or any other type of electromagnetic energy has to be coupled into it at just the right rate and frequency. A good analogy is that of a bell. To get the bell to ring you need to tap it with a hammer. If you tap to hard you can crack the bell and if you tap and hold the hammer on the bell to long you don't get a clean pure tone out of the bell.

The potential which appears at the high voltage terminal (spark gap transmitter/loop antenna) is developed through a process known as resonant rise which can greatly exceed the voltage that would otherwise be expected from conventional iron core transformers, using a simple calculation based upon the ratio of primary to secondary turns, that is to say ratio of transformation.

While in operation the system is continuously recharged by the flowing of ambient energy fields to the lower density sink byway of a cavity QED single-atom coupled antenna and ferrite bead choke coil and shading coil comprising (a one way valve) thus allowing for an uninterrupted flow of current through the circuit.

Spacing which forms a drift region between components minimizes inductive coupling between the transmission line coil and the Optical Atom-Coupled Cavity, preventing for the most part a portion of the energy that is continuously flowing into the resonator from passing backward through the system and becoming lost. Spacing also allows for focal length adjustments consisting of a sliding boom apparatus

One aspect that might be looked at is the freedom of vibration, ordinary ferromagnetic transformer must have tight coupling, or a high amount of mutual inductance between primary and secondary, thus the use of a material to convey magnetic flux between the cores to effect this transformative voltage rise made by turns ratio. Then resonance dose not come into the picture, except for reactive power corrections.

Circumspect to the phenomenon of sympathetic resonance where one tuning fork in vibration will also set another identical tuning fork into vibration. The fact that both are free to vibrate allows the effect to occur but if we clamped the bases together this might interfere with the sympathetic resonance as we are damping out those free vibrations by tighter coupling between the parts whereby giving them that direct line coupling we may in fact stop or kill all sympathetic oscillations.

Conversely this facet is shown to a much lesser degree with air core resonance when the primary is in the closest coupling, naturally we get the best efficiency, but the load of the secondary hinders the vibration of the primary (voltage wise) thus moving the

primary farther away from the secondary will allow the primary to express more amperage given the amount of voltage inputted to the primary because now the q factor of the primary has gone up, allowing its internal voltage rise to go higher than in the case for a tighter coupling.

There is an obvious tradeoff here, by moving the primary farther out, the secondary receives less of the primaries flux change, but at the same time doing this has allowed the primary to input more energy as amperage input per impressed voltage and larger voltage gain on the primary itself all of these phenomena of resonance are frequency dependent, in which your secondary coil is only going to work when you engage the primary to ring at the same frequency of ring that the secondary rings too.

Overcoupling may actually dampen the ring factor out of the equation, thus each part must have some freedom of vibration hence the separation of components. Since the ferrite bead choke coil transformer relies only on the material to convey the flux change, it is not dependent on some frequency that it will naturally ring too we can try to make it ring if desired, but it will be a highly damped ringing, going no where near the levels of voltage rise that would be predicted by its registered inductance set to a particular resonant frequency in fact doing this might saturate the core, meaning that no further amount of amp-turns of magnetic field are being created for the increased primary input. The advantage of air cores is that they do not saturate, and the lack of ferromagnetic inertia allows them to vibrate as fast as can be feasibly constructed by design.

Another aspect to all of this is that the higher the frequency the more lossy the ferromagnetic components become the primary industrial use of higher frequencies seems to be that of induction heating, where essentially those high loss factors become evident for ferromagnetic materials at high frequencies.

The natural rf energy and the natural ionic energy both in space as well as in the ionosphere pump the resonance and no manmade or artificial energy is required to maintain the resonant energy flow it is recognized that for every energy application system a source and sink system must exist for the transformation of the potential energy into the desired form of useful work a heat engine will not function unless there is a heat sink available a hydro plant will not operate unless there is a lower level sink to accept the flow. For this RF ionospheric system there must be a reflector a receiving antenna and the all-important sink (matched impedance resistive load).

An open or vacuum cavity resonator comprising a (single atom-coupled waveguide) can couple significant wattage right out of the air and can act as an electromagnetic sink

that couples significant wattage right out of the ambient radiation field. It can do so even when the ambient field is quite feeble this type of circuit mimics atomic absorption and stimulated emission.

In order to utilize this high-voltage energy you must do two things, make an energy sink and then devise a way of making the sink oscillate such a sink has to be at a lower energy state than the surrounding medium and for the energy to continually flow into it, the energy must be continually pumped out of it additionally this sink must maintain a lower energy state while meeting the power requirements of the load attached to it.

A horn feed antenna and optical atom-coupled waveguide and ferrite choke and shading coil perform the function of a one way valve which serve to energize the RLC coil or loop antenna spark gap transmitter via a chain reaction of an atomic squeezed or hour-glass mode or by the Rabi splitting of the ZPE and after sufficient time the charge discharges across the spark gaps whereby the radio cavities the delta antenna and implosion propulsion dielectric materials are energized to a high potential twin plate capacitors exhibiting the vector and edge effect the extension of electric lines of force between the outer edges of capacitor plates because the lines of force are not confined to the space between the plates they can cause capacititive coupling with external bodies the radio cavities are in essence turbo charging diode amplifiers producing a beat frequency composed of ZPE zero point energy and thus winding it up actually moving the EM energy through radial toroidal to axial rotation in other words a triune vortex implosion

Selected to resonate in response to the incident primary electromagnetic radiation in order to produce secondary electromagnetic radiation at a second frequency at an enhanced energy density means for transmitting the emitted secondary electromagnetic radiation at the beat frequency conducted through a tandem set of reverse wave cavities energized via said tank circuit antenna comprising a spark gap transmitter converter inductively connected to a plurality of the impedance matching antenna transceiver system.

In general the invention relates to the conversion of electromagnetic radiation but not by way of limitation atom, gamma, photon, light, rf, ZPE into electrical and implosion propulsion energy having both a push and a pull via the conversion of high frequency bandwidths contained within the cosmic spectrum known as the vacuum or zero point energy fields (ZPE).

Essentially the present invention utilizes an antenna array structure for receiving and transmitting incident electromagnetic radiation known to propagate through the vacuum of space or any other medium in which the receiving structures may be suitably located. The system of the present invention is specifically designed to convert but not by way of limitation the energy of atom, gamma, photon, light, ZPE or any other type of acoustic or electromagnetic energy.

The implosion propulsion receiving structures are composed of dielectric material in order to diffract and scatter the incident electromagnetic radiation. Additionally the receiving structures such as the optical atom coupled waveguide are of a volumetric size selected to enable the structures to resonate at the atomic transition frequency of the incident electromagnetic radiation or that of the Rabi frequency based on the parameters of frequency of the incident radiation and propagation characteristics of the medium and of the receiving antenna structures.

The system of the present invention also includes an antenna that receives the beat frequency radiation i.e. delta antenna receives the emitted reverse waves from the radio cavities however the emitted energy is returned to the system by way of for lack of a better term putting english on the wave energy thereby causing said energy to return into the antenna system and too be recycled thereby expand exponentially and approaches infinity.

The dielectric implosion propulsion plates are thus in the form of an array said pairs of the array are preferably positioned proximal to each other in order to maximize the amount of energy extracted from a particular area or space of a given size.

Herein as above and set forth the energy density of the zero point radiation increases as the frequency of the radiation increases it is desirable that the dielectric plates resonate at as high a bandwidth of frequencies as possible because the dielectric plates must be small in direct proportion to the wavelength of the high frequencies of the incident electromagnetic radiation at which resonance is desirably obtained a miniaturized system enhances the energy output capability of the system by enabling it to resonate at higher frequencies at which there are correspondingly higher energy densities consequently, utilization of an optical atom coupled antenna array in the system enhances the maximum amount of electrical energy provided by the system.

Accordingly, there has been provided, in accordance with the invention, a system which converts high frequency zero point electromagnetic radiation, atoms, light and/or any other type of incidental environmental energy into electrical energy and converting same to a superconductive implosion propulsion energy that is pull and push combined via vortex action effectively and efficiently and thus fully satisfies the objectives set forth above. It is to be understood that all terms used herein are descriptive rather than limiting. Although the invention has been specifically described with regard to the specific embodiments set forth herein, many alternative embodiments, modifications and variations including solid state components will be apparent to those skilled in the art in light of the disclosure set forth herein. Accordingly, it is intended to include all such alternatives, embodiments, modifications and variations or species embodied by this invention method that fall within the spirit and scope of the invention as set forth in the claims herein.

QED Inception and Lab Report

I Robert A. Patterson began research in 1984 and did conceive on the date in question December 15, 1994 an invention based on vortex mechanics composed of an electromagnetic implosion device and did merge electronics, antenna and turbo charging concepts together comprising a Quantum Electrodynamic Implosion Circuit and did begin construction of a prototype QED Implosion unit January 1, 1999 and did complete a first static model of said QED Implosion unit composed thereof a hand-fabricated set of dielectric plates and a set of backward wave radio cavities comprising a coaxial magnetron tube proximal and tandem-ally disposed there on a suitable circuit board as of January 2000 and witnessed by Mark McDaniel residing in Wapanucka Oklahoma whereupon I discovered several design flaws as a result of my manufacturing and assembly techniques and began revamping said QED Implosion unit completing the revisions on January I, 2001 with the completion of my first Optical Atom Coupled Waveguide.

I did document and file at least one petition seeking financial assistance via grant application to each of the Government agencies listed below and at least one application to:

(ZPower Corporation Arizona 11/29/99 "The Ultimate Heist Superconductivity")
a contact letter to (Bill Clinton US President June 20, 2000 "Superconductive Technologies")
(DOE 7/16/2000 "Ambient Temperature Superconductive Technologies") (DARPA 2/5/2001 BAA 01-21)

(DOD April 2, 2001 "Vacuum Cohesion Vehicles")
(Rolex Awards For Enterprise July 29, 2002 11:29:42 AM "Reverse Engineering")

First mock-up 1999

I continued refining the QED Implosion system and technology as well as documenting my discoveries via photographic means and burning same onto CD storage diskettes 1999 - 2003

I constructed a first parabolic dish antenna from a Chinese Wok a cooking utensil and fabricated a delta antenna and coil from a stiff piece of copper wire that I bent into the proper configuration comprising a delta antenna and feeder coils I constructed a tandem set of dielectric edge plate energized capacitors from 1/8 inch Plexiglas as the dielectric material and # 40 aluminum flat stock laminated to a pair of 14 inch plates composed thereof dielectric material thus forming the plate capacitors with at least one surface or face of said plate comprising a triple-arc or a dome structure composed there of two sets of aluminum pie pans laminated and stacked one on top of the other consisting of a five inch diameter pie pan and the other a nine inch diameter aluminum pie pan this particular argument of shaping the dielectric plates was to facilitate the formation of a plasma vortex in the near and fields of the dielectric material compare with other such shaped electrodes.

I constructed a twin set of radio cavities using coffee cans as the base structure I constructed coaxial-anode structures that is the rectangular resonators by wrapping aluminum foil around a measuring stick one inch by one inch by four inches and made end caps on one end by folding the aluminum foil over and pressing it closed I made upper end caps from a pattern using pie pans as the stock material I cut and folded the material to make end caps for the resonators using a paper hole punch I punched cooling holes and rf apertures into and through the upper most sections of the coaxial-anode resanent structures the original cathode for this first model was made from aluminum soda cans from which I made internal reflectors by reversing the end caps of the soda cans.

Using a Plexiglas tube I separated the anode structures from the cathode with board stock from cereal boxes I cut retainer rings to hold the resonant cavity anodes apart from one another and used silicone to secure the assembly together and slid the anode assembly into the coffee cans I mocked-up the Optical Atom Coupled Waveguide with a salvaged section of horn feed and cavity resonator that I scavenged from surplus satellite dish systems and a pair of lenses from binoculars, which I placed in the waveguide thereby forming an optical waveguide.

I formed a first set of lens apertures and mocked-up a first choke coil from a surplus alternator I salvaged from a junk car and I mocked-up a tank circuit using some stereo (Y) connectors that I purchased from the local radio surplus store I made a set of spark gap electrodes for my tank circuit out of ¾ inch steel bearings

I became aware very early on that my invention would be capable of becoming a superconductive power source collectively energized via EM RF Atomic energy scavenged from the environment

First Revision June 2000

I fabricated a tank circuit transmission line from a folded dipole antenna that I hand fabricated from an aluminum door seal it was at this juncture that I wove by hand a set of high voltage cables thus forming the HV transmission lines for the spark gap electrodes also I salvaged a set of HV adjustable mounting lugs and hand fabricated a set of brass spark gap electrodes that could now be adjusted by set screws I salvaged and attempted to use capacitors from discarded microwave ovens connected into the tank circuit also at this juncture in time I located and acquired equipment capable of radio detection consisting of an RF Frequency Counter Cat. # 22-305 from Radio Shack and a Micranta AF and RF Transistorized Single Tracer and a Continuity Meter MC-1015B and began testing and receiving anomalous readings coming from the QED Implosion unit I did in fact detect and discover that the unit was resanent with the atomic transition frequency and built a sliding boom apparatus for both the optical waveguide as well as the shading coil still waiting for the ferrite beads to arrive in the mail to make the choke coil combination with

Second Revision January 1, 2001

Circumspect to the realization that the dynamics at work in the environment is interchangeable with those of electronic components and their circuitry. That fluid dynamic concepts are equivalent and wholly interchangeable with those of the electromagnetic spectrum and insomuch as my designs dealt with the amplification of power I began the study of electronics infused with Vortex Mechanics including the scavenging concepts of fluid dynamics and turbo charging systems. Conceptualizing an electronic circuit equivalent in function to a Vortex-turbo-charging-unit for the express purpose of extracting usable power.

Now focused, I searched for electronic components best matching the turbo charging criteria. I found the magnetron tube to be the closest matching electronic device via similar function and shape; producing both radial and axial rotation, vortex formations being the key issue.

In other words they are synonymous, the magnetron tube functions in like manner as a turbo-charging unit, albeit electrical verses a mechanical and fluid medium I also came to the realization June 4, 2003 while composing a rough draft of my patent application that a coaxial magnetron and radio cavity assembly may indeed function in a similar manner as an atom by comparison only.

I constructed a revised loop antenna tank circuit from copper tubing that I bought at a local supplier using my LP tank as a jig I formed the copper tubing into a circular loop I fabricated a tunable butterfly capacitor form Plexiglas material and aluminum flat stock and bolted the assembly together with all-thread material and mounted the assembly together with the loop antenna using U-bolts I drilled holes into and through the circuit board and mounted the antenna tank circuit onto and through the holes cut into the circuit board there in the center of the boresight forming the antenna array I salvaged a 6 foot satellite dish antenna and mounted it to the circuit board with nuts and bolts located along the boresight of the array

Mock-up # 3

I salvaged surplus magnetron tubes from several microwave ovens 3/14/2002 11:00 AM I mounted the magnetron tubes into my radio cavity assemblies and wired their leads into and forming a regenerative feedback loop and circuit in the form of strap lines disposed around the resanent cavity anode structures. I fabricated a ferrite bead choke comprising a deflection yoke coil and shading coil unit I constructed a delta antenna and spiral coil from ¼ inch copper tubing and mounted the delta antenna there in the focal length of the dish antenna

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Coming full crucial I am now aware that there are at least three issues preventing the QED Implosion system from operating two issues exists in the optical atom coupled waveguide an issue that occurs there is the need for proper microwave lenses in order to couple a broad spectrum into the optical cavity waveguide and the second issue is the need for capasitive and inductive tuning screws to be located strategically within the maximum electric and magnetic lines of force to facilitate proper tuning of the waveguide and the third and final issue is the need to rebuild the backward wave coaxial radio cavities from nonmagnetic materials and using better fabrication techniques then those previously used actually replacing the aluminum resonator anodes with copper tubing ensuring a stable design that is capable of resonating at the proper frequencies and producing a beat frequency

Experimentally I invasion the need to calculate and convert lens magnification powers into their frequency equivalencies, as an example I may be able to use a pair of high powered binoculars as the lens apertures in the optical waveguide in order to activate the system vs. buying or having made expensive lenses, therefor it may be important to know the frequency conversion ratio that exists between lens magnification powers and light an EM source and the same frequency of that source. In this way I may be able to evaluate the possibility of using a set of binoculars to focus the proper EM frequency through the optical waveguide of the present innovation.

Experimentally I want to employ as a HV souse a PC monitor as a source of ionization in an attempt to verify that I can charge up or energize the tank circuit and cause the spark gap electrodes to arc over. I certainly believe it will be possible to get the circuit to work even without the optical waveguide functioning at this time by temporarily replacing the optical waveguide with an ionization source that may be supplied by the HV PC monitor which my double at least temporally as a HV source of ionization.

Conclusion

In summary, I have provided a conjoined marriage of technology which covers theory and practice across a wide range of disciplines for the extraction and amplification of environmental space energies comprising a superconductive electrical implosion propulsion system and from the foregoing it will be apparent that the present invention provides a novel renewable energy source and a superconductive quantum electrodynamic implosion propulsion and transportation system when married with the quantum electro dynamic implosion propulsion unit and the selective shape of the vacuum cohesion vehicle and its ceramic compositions therein volume I and Volume II